

CHAPTER 4.1.2.

WHITE SPOT DISEASE

Article 4.1.2.1.

For the purposes of this *Aquatic Code*, white spot disease (WSD) means infection with the viral species *White spot syndrome virus* (WSSV) in the genus *Whispovirus* of the family Nimaviridae. Common synonyms are listed in Chapter 4.1.2. of the *Aquatic Manual*.

Methods for surveillance and diagnosis are provided in the *Aquatic Manual*.

Article 4.1.2.2.

**Susceptible species**

For the purposes of this *Aquatic Code*, *susceptible species* for WSD are all decapod (order *Decapoda*) crustaceans from marine and brackish or freshwater sources. ~~In addition, Bivalves, rotifers, the non-decapodal crustacean *Artemia salina*, krill, copepods, and aquatic arthropods, sea slaters (*Isopoda*) and *Euphydradae* insect larvae, can accumulate high concentrations of viable WSSV although there is no evidence of replication in these species.~~

Suspect cases of natural infection with WSSV in species other than those listed in this Article should be referred immediately to the OIE Reference Laboratory for WSD, whether or not clinical signs are associated with the findings.

Article 4.1.2.3.

**Commodities**

- 1) When authorising import or transit of the following *commodities*, *Competent Authorities* should not require any WSD related conditions, regardless of the WSD status of the *exporting country*, *zone* or *compartment*:

[under study]

- a) ~~cooked, canned or dried crustaceans (or molluscs as mechanical vectors) for direct human consumption;~~
- b) ~~chitin prepared from crustaceans shell by chemical extraction;~~
- e) ~~heat dried or sun dried crustacean by products intended for use in animal feeds or dry pelleted animal feeds containing crustacean by products;~~
- e) ~~*Artemia* cysts;~~
- d) ~~chemically preserved (and rendered non-infectious) specimens of the species listed in Article 4.1.2.2;~~

- 2) When authorising import or transit of the following *commodities* of a species listed in Article 4.1.2.2., *Competent Authorities* should require the conditions prescribed in Articles 4.1.2.7. to 4.1.2.11. of this Chapter, relevant to the WSD status of the *exporting country*, *zone* or *compartment*:
  - a) *aquatic animals*;
  - b) *aquatic animal products*.
- 3) When considering the import or transit of a *commodity* not listed above from an *exporting country*, *zone* or *compartment* not declared free of WSD, *Competent Authorities* of the *importing country* should conduct an analysis of the risk of introduction, establishment and spread of WSSV, and the potential consequences, associated with importation of the *commodity*, prior to a decision. This assessment should be made available to the *exporting country*.

#### Article 4.1.2.4.

### WSD free country

A country may declare itself free from WSD if it meets the conditions in point 1), 2) or 3) or 4) below.

If a country shares a water catchment or coastal zone ~~water resource~~ with one or more other countries, it can only declare itself a WSD free country if all the areas covered by the shared water ~~resource~~ are declared WSD free countries or zones (see Article 4.1.2.5.).

- 1) A country where none of the species listed in Article 4.1.2.2. is present may declare itself free from WSD when *basic biosecurity conditions* have been in place met continuously in the country for at least the past 2 years<sup>1</sup>.

OR

- 2) A country where the species listed in Article 4.1.2.2. are present but there has never been any observed occurrence of the *disease* for at least the past 10 years despite conditions that are conducive to its clinical expression, as described in Chapter X.X.X. of the *Aquatic Manual*, may declare itself free from WSD when *basic biosecurity conditions* have been in place met continuously in the country for at least the past 2 years.

OR

- 3) A country where the last observed occurrence of the *disease* was within the past 10 years or where the infection status prior to *targeted surveillance* was unknown, for example because of the absence of conditions conducive to clinical expression, as described in Chapter X.X.X. of the *Aquatic Manual*, may declare itself free from WSD when:
  - a) it has met *basic biosecurity conditions* have been met continuously for at least the past 2 years;  
and

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<sup>1</sup> The typical life cycle for susceptible species is 2 years or less. Under conditions conducive to disease expression, this period is required because it would cover the time period in which the most susceptible life stage (i.e. juvenile) is present.

- b) *targeted surveillance* as described in Chapters 1.1.4. and X.X.X. of the *Aquatic Manual* has been in place for at least the past 2 years without detection of WSSV.

OR

4) A country that had declared itself free from WSD but in which the *disease* is detected may not declare itself free from WSD again until the following conditions have been met:

- a) on detection of the *disease*, the affected area was declared an *infected zone* and a *buffer zone* was established; and
- b) a *stamping-out policy* has been implemented in the *infected zone*, and the appropriate *disinfection procedures* (see *Aquatic Manual*) have been completed; and
- c) *targeted surveillance*, as described in Chapters 1.1.4. and X.X.X. of the *Aquatic Manual*, has been in place for at least the past 2 years without detection of WSSV.

In the meantime, other areas of the remaining *territory* may be declared one or more *free zones*, provided that they meet the conditions in point 3) of Article 4.1.2.5.

Article 4.1.2.5.

#### **WSD free zone or free compartment**

A *zone* or *compartment* within the *territory* of one or more countries not declared free from WSD may be declared free by the *Competent Authority(ies)* of the country(ies) concerned, if the *zone* or *compartment* meets the conditions referred to in point 1), 2) or 3) or 4) below.

If a *zone* or *compartment* extends over more than one country, it can only be declared a WSD free *zone* or *compartment* if all the relevant *Competent Authorities* confirm that the conditions have been met.

- 1) A *zone* or *compartment* where none of the species listed in Article 4.1.2.2. is present may be declared free from WSD when *basic biosecurity conditions* have been in place met continuously in the *zone* or *compartment* for at least the past 2 years.

OR

- 2) A *zone* or *compartment* where the species listed in Article 4.1.2.2. are present but in which there has not been any observed occurrence of the *disease* for at least the past 10 years despite conditions that are conducive to its clinical expression, as described in Chapter X.X.X. of the *Aquatic Manual*, may be declared free from WSD when *basic biosecurity conditions* have been in place met continuously in the *zone* or *compartment* for at least the past 2 years.

OR

- 3) A *zone* or *compartment* where the last observed occurrence of the *disease* was within the past 10 years or where the infection status prior to *targeted surveillance* was unknown, for example because of the absence of conditions conducive to clinical expression, as described in Chapter X.X.X. of the *Aquatic Manual*, may declare itself free from WSD when:
- a) it has met *basic biosecurity conditions* have been met continuously for at least the past 2 years; and

- b) *targeted surveillance* as described in Chapters 1.1.4. and X.X.X. of the *Aquatic Manual* has been in place, throughout the *zone* or *compartment*, for at least the past 2 years without detection of WSSV.

OR

4) A *zone* previously declared free from WSD but in which the *disease* is detected may not be declared free from WSD again until the following conditions have been met:

- a) on detection of the *disease*, the affected area was declared an *infected zone* and a *buffer zone* was established; and
- b) a *stamping-out policy* has been implemented in the *infected zone*, and the appropriate *disinfection procedures* (see *Aquatic Manual*) have been completed; and
- c) *targeted surveillance*, as described in Chapters 1.1.4. and X.X.X. of the *Aquatic Manual*, has been in place for at least the past 2 years without detection of WSSV.

Article 4.1.2.6.

#### **Maintenance of free status**

A country or *zone* or *compartment* that is declared free from WSD following the provisions of points 1) or 2) of Articles 4.1.2.4. or 4.1.2.5., respectively, may maintain its status as WSD free provided that *basic biosecurity conditions* are continuously maintained.

A country or *zone* or *compartment* that is declared free from WSD following the provisions of point 3) of Articles 4.1.2.4. or 4.1.2.5., may discontinue *targeted surveillance* and maintain its status as WSD free provided that conditions that are conducive to clinical expression of WSD, as described in Chapter X.X.X. of the *Aquatic Manual*, exist and *basic biosecurity conditions* are continuously maintained.

However, for declared free *zones* or *compartments* in infected countries and in all cases where conditions are not conducive to clinical expression of WSD, *targeted surveillance* needs to be continued at a level determined by the *Competent Authority* on the basis of the likelihood of reinfection.

Article 4.1.2.7.

#### **Importation of live animals from a country, zone or compartment declared free from WSD**

When importing *aquatic animals* of the species listed in Article 4.1.2.2., other than those *commodities* listed in point 1) of Article 4.1.2.3., from a country, *zone* or *compartment* declared free from WSD, the *Competent Authority* of the *importing country* should require an *international aquatic animal health certificate* issued by the *Competent Authority* of the *exporting country* or a *certifying official* approved by the *importing country*, certifying that, on the basis of the procedures described in Articles 4.1.2.4. or 4.1.2.5. (as applicable), the place of production of the consignment is a country, *zone* or *compartment* declared free from WSD.

The certificate shall be in accordance with Model Certificate No. [X] in Part 6 of this *Aquatic Code*.

Article 4.1.2.8

**Importation of live animals for aquaculture activities from a country, zone or compartment not declared free from WSD**

When importing for *aquaculture activities*, *aquatic animals* of the species listed in Article 4.1.2.2., other than those *commodities* listed in point 1) of Article 4.1.2.3., from a country, *zone* or *compartment* not declared free from WSD, the *Competent Authority* of the *importing country* should assess the risk and apply risk mitigation measures such as ~~require that~~:

- 1) the consignment is be delivered directly into and held in approved quarantine secure rearing facilities; and
- 2) the imported *aquatic animals* and their first generation progeny are be continuously isolated from the local environment; and
- 3) all effluent and waste material is be treated in a manner that ensures inactivation of WSSV.

If the intention of the introduction is the establishment of new genetic lines, international standards, such as the the Guidelines of the International Council for the Exploration of the Seas (ICES) should be followed.

For the purposes of this *Aquatic Code*, the ICES Guidelines may be summarised to the following main points:

- 1) identify stock of interest (cultured or wild) in its current location;
- 2) evaluate stock's health/disease history;
- 3) take and test samples for WSSV, pests and general health/disease status;
- 4) import and *quarantine* in a secure facility a founder (F-0) population;
- 5) produce F-1 generation from the F-0 stock in *quarantine*;
- 6) culture F-1 stock and at critical times in its development (life cycle) sample and test for WSSV and perform general examinations for pests and general health/disease status;
- 7) if WSSV is not detected, pests are not present, and the general health/disease status of the stock is considered to meet *basic biosecurity conditions* of the importing *compartment, zone, or country* the F-1 stock maybe defined as WSD free or specific pathogen free (SPF) for WSSV;
- 8) release SPF F-1 stock from *quarantine* for aquaculture or stocking purposes in the *compartment, zone, or country*.

Article 4.1.2.9.

**Importation of live animals for processing and/or human consumption from a country, zone or compartment not declared free from WSD**

When importing for processing and/or human consumption, *aquatic animals* of the species listed in Article 4.1.2.2., other than those *commodities* listed in point 1) of Article 4.1.2.3., from a country, *zone* or *compartment* not declared free from WSD, the *Competent Authority* of the *importing country* should assess the risk and apply risk mitigation measures such as ~~require that~~:

- 1) the consignment ~~is be~~ delivered directly to and held in ~~approved~~ quarantine ~~secure holding~~ facilities for a short period before processing and/or consumption, and
- 2) all effluent and waste material ~~is be~~ treated in a manner that ensures inactivation of WSSV.

Article 4.1.2.10.

### **Importation of products from a country, zone or compartment free from WSD**

When importing *aquatic animal products* of the species listed in Article 4.1.2.2., other than those *commodities* listed in point 1) of Article 4.1.2.3., from a country, *zone* or *compartment* free from WSD, the *Competent Authority* of the *importing country* should require an *international aquatic animal health certificate* issued by the *Competent Authority* of the *exporting country* or a *certifying official* approved by the *importing country*, certifying that, on the basis of the procedures described in Articles 4.1.2.4. or 4.1.2.5. (as applicable), the place of production of the consignment is a country, *zone* or *compartment* declared free from WSD.

The certificate shall be in accordance with Model Certificate No. [X] in Part 6 of this *Aquatic Code*.

Article 4.1.2.11

### **Importation of products from a country, zone or compartment not declared free from WSD**

When importing *aquatic animal products* of the species listed in Article 4.1.2.2., other than those *commodities* listed in point 1) of Article 4.1.2.3., from a country, *zone* or *compartment* not declared free from WSD, the *Competent Authority* of the *importing country* should assess the risk and apply appropriate risk mitigation measures, such as require that:

- 1) ~~the consignment is be delivered directly to and held in approved secure storage facilities, and be processed only in approved processing plants; and~~
- 2) ~~all effluent and waste material is be treated in a manner that ensures inactivation of WSSV.~~

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